



FLIGHT REPORT

NORTH DAKOTA ATMOSPHERIC RESOURCE BOARD
SFN 50864(12/2014)

ENGINES OFF 00:06:45	HOURS 3.56		PAGE # 1	OF 3
ENGINES ON 20:33:01	DRY ICE RATE 0	1 GEN 1.45	2 GEN 1.24	
TOTAL TIME 03:33:44	DRY ICE (lbs) 0.00	EJCTBL (grams) 0	BIP (grams) 75	

DATE June 29, 2017		DISTRICT 2	SEED # 4	PILOT Anna Mattson				COPILOT Brandon Peterson				PURPOSE H	REMARKS R - Rain H - Hail O - Other M - Maintenance C - Reconnaissance
Time (HH:MM)	EVENT #	LATITUDE (deg)	LONGITUDE (deg)	CLD BASE (kft)	ALTITUDE (KFT)	UPDRAFT (FT/MIN)	TEMP (°C)	PRECIP CODE**	DRY ICE (sec)	FLARES		WINTIP GEN (#)	
										EJC	BIP		
20:33:08		48.30069	-102.4016		2.2					0	0	0	Engines on in Stanley.
20:43:09		48.40800	-102.2727		5.8					0	0	0	
20:53:10		48.45653	-102.1580		5.5					0	0	0	
20:56:28	1	48.47108	-102.1482	7.5	6.1	500	7	3		0	0	2	Two burners on.
20:58:04	2	48.45130	-102.1119	7.5	6.0	500	7	3		0	1	2	BIP lit.
21:08:05		48.47920	-101.9903		6.5					0	0	2	
21:18:07		48.46941	-101.8454		7.0					0	0	2	
21:26:34		48.44099	-101.8790	7	7.0	700	3	4		0	0	2	
21:34:50	3	48.40857	-101.8545	7	6.8	400	5	4		0	0	1	Right burner off.
21:44:51		48.39818	-101.7388		6.6					0	0	1	
21:53:19	4	48.37081	-101.6599	7	6.7	0	3	4		0	0	0	Left burner off.
22:03:20		48.28831	-102.1584		7.6					0	0	0	
22:12:58	5	48.34365	-102.5975	7	7.9	300	3	1		0	0	1	Right burner on.

**PRECIPITATION INTENSITY

- 0 - No Precipitation
- 1 - virga only, precip not to ground
- 2 - rain shaft to surface, light
- 3 - rain shaft well established, but can be seen through
- 4 - heavy rain shaft, cannot be seen through

MISSION SUMMARY

We were launched to seed a line of storms that developed in the northern portion of the district. Deemed a hail threat, we made several passes along the storm with both burners on. Once we found consistent inflow of 500 to 700fpm, we lit a BIP as well. The storm weakened in strength, so we turned off one burner, and continued to seed the cell for rain enhancement. After weakening further, we were instructed to follow a line of developing showers that stretched from Stanley past Watford City. After making a few circles around areas of weak inflow, the line began to strengthen. We made several passes along the southern portions of the district with both burners on; seeding for hail suppression. We ran out of chem on our left generator, then shortly after on our right generator. We returned back to Stanley.



FLIGHT REPORT

NORTH DAKOTA ATMOSPHERIC RESOURCE BOARD
SFN 50864(12/2014)

ENGINES OFF 00:06:45	HOURS 3.56		PAGE # 2	OF 3
ENGINES ON 20:33:01	DRY ICE RATE 0	1 GEN 1.45	2 GEN 1.24	
TOTAL TIME 03:33:44	DRY ICE (lbs) 0.00	EJCTBL (grams) 0	BIP (grams) 75	

DATE June 29, 2017		DISTRICT 2	SEED # 4	PILOT Anna Mattson				COPILOT Brandon Peterson				PURPOSE H	REMARKS R - Rain H - Hail O - Other M - Maintenance C - Reconnaissance
Time (HH:MM)	EVENT #	LATITUDE (deg)	LONGITUDE (deg)	CLD BASE (kft)	ALTITUDE (KFT)	UPDRAFT (FT/MIN)	TEMP (°C)	PRECIP CODE**	DRY ICE (sec)	FLARES		WINTIP GEN (#)	
										EJC	BIP		
22:22:59		48.28119	-102.8401		7.5					0	0	1	
22:32:06	6	48.13392	-102.9373	8	8.2	500	4	4		0	0	2	Left burner on.
22:42:11		48.06274	-102.8874		7.7					0	0	2	
22:52:12		48.01625	-102.8145		8.3					0	0	2	
23:02:13		48.01182	-102.7456		7.8					0	0	2	
23:05:43	7	47.91592	-102.8233	7.8	8.0	600	8	4		0	0	1	Right burner off.
23:15:44		47.92688	-102.6746		7.5					0	0	1	
23:25:49		47.92011	-102.5867		7.6					0	0	1	
23:27:30	8	47.95808	-102.5387	8	7.4	600	10	4		0	0	2	Right burner on.
23:30:09	9	47.91848	-102.5603	8	7.5	600	10	4		0	0	1	Left burner off.
23:40:11		47.76685	-102.6484		7.5					0	0	1	
23:50:16		47.96575	-102.3370		7.5					0	0	1	
23:58:01	10	48.22600	-102.2234	7.5	4.2	100	20	2		0	0	0	Right burner off.

**PRECIPITATION INTENSITY

- 0 - No Precipitation
- 1 - virga only, precip not to ground
- 2 - rain shaft to surface, light
- 3 - rain shaft well established, but can be seen through
- 4 - heavy rain shaft, cannot be seen through

MISSION SUMMARY

We were launched to seed a line of storms that developed in the northern portion of the district. Deemed a hail threat, we made several passes along the storm with both burners on. Once we found consistent inflow of 500 to 700fpm, we lit a BIP as well. The storm weakened in strength, so we turned off one burner, and continued to seed the cell for rain enhancement. After weakening further, we were instructed to follow a line of developing showers that stretched from Stanley past Watford City. After making a few circles around areas of weak inflow, the line began to strengthen. We made several passes along the southern portions of the district with both burners on; seeding for hail suppression. We ran out of chem on our left generator, then shortly after on our right generator. We returned back to Stanley.

FLIGHT REPORT

NORTH DAKOTA ATMOSPHERIC RESOURCE BOARD

SFN 50864(12/2014)

ENGINES OFF 00:06:45	HOURS 3.56		PAGE # 3	OF 3
ENGINES ON 20:33:01	DRY ICE RATE 0	1 GEN 1.45	2 GEN 1.24	
TOTAL TIME 03:33:44	DRY ICE (lbs) 0.00	EJCTBL (grams) 0	BIP (grams) 75	

[illegible]

****PRECIPITATION INTENSITY**

- 0 - No Precipitation
- 1 - virga only, precip not to ground
- 2 - rain shaft to surface, light
- 3 - rain shaft well established, but can be seen through
- 4 - heavy rain shaft, cannot be seen through

MISSION SUMMARY

We were launched to seed a line of storms that developed in the northern portion of the district. Deemed a hail threat, we made several passes along the storm with both burners on. Once we found consistent inflow of 500 to 700fpm, we lit a BIP as well. The storm weakened in strength, so we turned off one burner, and continued to seed the cell for rain enhancement. After weakening further, we were instructed to follow a line of developing showers that stretched from Stanley past Watford City. After making a few circles around areas of weak inflow, the line began to strengthen. We made several passes along the southern portions of the district with both burners on; seeding for hail suppression. We ran out of chem on our left generator, then shortly after on our right generator. We returned back to Stanley.